

## UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.usplo.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/033,073	12/26/2001	Kohji Yoshie	KON-1703	2772
20311 7.	590 11/29/2004		EXAMINER	
	N, LUCAS AND MEI	YAN, REN LUO		
475 PARK AVENUE SOUTH 15TH FLOOR			ART UNIT	PAPER NUMBER
NEW YORK,	NY 10016		2854	

DATE MAILED: 11/29/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)			
, ,	10/033,073	YOSHIE ET AL.			
Office Action Summary	Examiner	Art Unit			
	Ren L Yan	2854			
The MAILING DATE of this communication a Period for Reply		orrespondence address			
A SHORTENED STATUTORY PERIOD FOR REF THE MAILING DATE OF THIS COMMUNICATION  - Extensions of time may be available under the provisions of 37 CFR after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a re- If NO period for reply is specified above, the maximum statutory perions  - Failure to reply within the set or extended period for reply will, by state Any reply received by the Office later than three months after the mained patent term adjustment. See 37 CFR 1.704(b).	N.  1.136(a). In no event, however, may a reply be timely within the statutory minimum of thirty (30) days will apply and will expire SIX (6) MONTHS from ute, cause the application to become ABANDONE	nely filed s will be considered timely. the mailing date of this communication. D (35 U.S.C. § 133).			
Status					
<ul> <li>1) Responsive to communication(s) filed on 03</li> <li>2a) This action is FINAL. 2b) The Triple of The Triple of Trip</li></ul>	nis action is non-final.  vance except for formal matters, pro				
Disposition of Claims					
<ul> <li>4)  Claim(s) 1-19 is/are pending in the application.</li> <li>4a) Of the above claim(s) 15-19 is/are withdrawn from consideration.</li> <li>5)  Claim(s) is/are allowed.</li> <li>6)  Claim(s) 1-14 is/are rejected.</li> <li>7)  Claim(s) is/are objected to.</li> <li>8)  Claim(s) are subject to restriction and/or election requirement.</li> </ul>					
Application Papers					
9) The specification is objected to by the Exami 10) The drawing(s) filed on is/are: a) a Applicant may not request that any objection to the Replacement drawing sheet(s) including the correct 11) The oath or declaration is objected to by the	ccepted or b) objected to by the lessence of a because of the lessence of the drawing of the dra	e 37 CFR 1.85(a). jected to. See 37 CFR 1.121(d).			
Priority under 35 U.S.C. § 119					
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  a) All b) Some * c) None of:  1. Certified copies of the priority documents have been received.  2. Certified copies of the priority documents have been received in Application No  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  * See the attached detailed Office action for a list of the certified copies not received.					
Attachment(s)  1) Notice of References Cited (PTO-892)  2) Notice of Draftsperson's Patent Drawing Review (PTO-948)	4)				
Information Disclosure Statement(s) (PTO-1449 or PTO/SB/0 Paper No(s)/Mail Date		Patent Application (PTO-152)			

## **DETAILED ACTION**

Applicant's election without traverse of Group I, claims 1-14 in the reply filed on 9-3-2004 is acknowledged.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1, 3, 9-11 and 14 are rejected under 35 U.S.C. 102(e) as being anticipated by Okamoto et al(6,430,382). The patent to Okamoto et al teaches the structure of an image forming apparatus with a hole-punching processor as claimed including an image forming section to form an image on a sheet, an ejecting section to eject the sheet after being printed and a hole-punching processor unit 50 for punching a hole on a sheet in a conveying path and for conveying the sheet through the hole-punching processor unit. The hole-punching processor unit 50 has hole-punching rollers 40 and 41 that move in a direction perpendicular to a conveyance direction of the sheet and has a sheet-edge detector 43 to detect a side-edge of the sheet in a direction parallel to the conveyance direction of the sheet. The hole-punching rollers 40 and 41 move with the sheet-edge detector 43 to the center of the sheet, based on the positional information of the side-edge detected by the sheet-edge detector 43, to punch a hole in the sheet. See Figs. 6-8 and column 8, line 59 through column 9, line 37 in Okamoto et al for details. With respect to claim 3, Okamoto et al teach in column 9, lines 27-30 that when a leading edge of the sheet reaches to the hole-punching processor unit 50, the hole-punching rollers and sheet edge

detector move in a direction perpendicular to the sheet conveyance direction so that the sheetedge detector detects a position of the side-edge of the sheet. With respect to claims 10 and 14, Okamoto et al teach to move the sheet-edge detector 43 to a home position as shown in Fig. 8F after the hole-punching operation on a sheet and in case of a non-punching mode, the holepunching rollers 40 and 41 are not rotated and sheets can be fed through the gap between the rollers without being punched. See the first sentence in column 9.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 2 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Okamoto et al in view of Suzuki et al((5,182,861). Okamoto et al teach all that is claimed except for the use of multiple sheet-edge detectors each corresponds to a different sheet size as recited. Suzuki et al teach in a sheet drafting apparatus the conventionality of using a plurality of sheet edge detectors 90 each corresponds to a different sheet width size for detection of the sheet edge. See Fig. 1 and column 3, lines 51-53 in Suzuki et al for example. It would have been obvious to one of ordinary skill in the art to provide the image forming apparatus of Okamoto et al with the plurality of sheet-edge detectors appropriately disposed as taught by Suzuki et al so as to reduce the travel distance otherwise required of a single detector in order to suit for different width size sheets being printed.

Claims 4, 6, 7 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Okamoto et al in view of Kamada et al(4,789,903). Okamoto et al teach all that is claimed

Art Unit: 2854

except that the sheet-edge detector is not used to detect the leading edge and trailing edge of the sheet and it is unclear the type of sheet-edge detector is used. The patent to Kamada et al teaches in an image forming apparatus the conventional use of a reflection type photo detector to detect the leading edge, the trailing edge and the side edge of the recording paper sheet. See the paragraph bridging columns 7 and 8 in Kamada et al for example. In view of the teaching of Kamada et al, it would have been obvious to those having ordinary skill in the art to provide the image forming apparatus of Okamoto et al with the reflection type photo detector capable of detecting the leading edge, the trailing edge and the side edge of the sheet so as to simplify the structural requirement of the image forming apparatus.

Claims 5 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Okamoto et al in view of Kamada et al as applied to claims 4 and 7 above, and further in view of Suzuki et al. Okamoto et al, as modified by Kamada et al, teach all that is claimed except for the use of multiple sheet-edge detectors each corresponds to a different sheet size as recited. Suzuki et al teach in a sheet drafting apparatus the conventionality of using a plurality of sheet edge detectors 90 each corresponds to a different sheet width size for detection of the sheet edge. See Fig. 1 and column 3, lines 51-53 in Suzuki et al for example. It would have been obvious to one of ordinary skill in the art to provide the image forming apparatus of Okamoto et al, as modified by Kamada et al, with the plurality of sheet-edge detectors appropriately disposed as taught by Suzuki et al so as to reduce the travel distance otherwise required of a single detector in order to suit for different width size sheets being printed.

Art Unit: 2854

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ren L Yan whose telephone number is 571-272-2173. The examiner can normally be reached on 8:30am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Hirshfeld can be reached on 571-272-2168. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Ken yan

**Primary Examiner** Art Unit 2854

Ren Yan

Nov. 23, 2004